

Feed Line

Providing Amateur Radio news for the Triad



Volume 16, No 2

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Web Site: www.w4gso.org

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Project Idea Suggested For Group Activity

by Chris Thompson, K4HC

Vice President, GARA

I have a project in mind for the members of the club (or anyone else who is interested, for that matter).

Tony Parks, KB9YIG kits the SoftRock Lite v6, which is a single-board, single-band SDR (Software Defined Radio) receiver. Kits are available for 160, 80, 40, 30 and 20 meters. Cost is \$10 (including postage).

After building the receiver, simply connect power, antenna, and connect to the sound card in your computer.

SDR enabled communications devices can be dynamically programmed in software to reconfigure the characteristics of equipment. In other words, the same piece of "hardware" can be modified to perform different functions at different

times. This allows the manufacturer to concentrate development efforts on a common hardware platform.

Several software packages are available free of charge that will work with this receiver. This enables your computer to perform all of the signal processing, keeping the hardware very simple.

This would be a great way to introduce yourself to SDR, surface-mount construction (this kit has a mix of surface mount and thru-hole components), and kit building.

To order a kit, you must order it directly from Tony Parks. The two ways he accepts are by PayPal to username raparks@ctcisp.com - or you can send a check or money order to:

Tony Parks
1344 E 750 N
Springport, IN 47386

Specify the SoftRock Lite v6, select your band (160, 80, 40, 30 or 20 meters)

After the kits are ordered, I'll schedule one or two build sessions to put these together. Experienced kit builders will be here to help, and provide instruction in surface mount soldering.

Then, all you need are a computer with sound card, and an antenna to start having fun with your own SDR receiver!

Depending on how well this project goes, I'd like to continue with other projects that members might find interesting and useful.

Please contact Chris Thompson, K4HC (k4hc@triad.rr.com) if you are interested in participating.

New Emergency Radio Focus From ARRL



2007 publicity efforts from ARRL headquarters, includes a focus on Amateur Radio's emergency communications capability, both as a resource to the community and individual families. Check out the new web site at www.emergencyradio.org.

Marconi Re-enactment Continues

Marconi's 1901 transmission was the first time that a radio broadcast had been heard across the Atlantic but even to today there is still some confusion over how he managed to do it. Especially since there was a solar minimum at the time and propagation was spotty at best.

Late last year the Poldhu Amateur Radio Club in the United Kingdom and the Marconi Radio Club in Canada teamed up to try to re-enact the 1901 experiment.

Their aim was to shed new light on this

andmark event in radio history. They decided to perform the experiment now because the solar conditions at present are similar to when Marconi claimed to have succeeded.

On November 1st of 2006, the Poldhu Amateur Radio Club fired up its GB3SSS beacon and began making regular two-minute transmissions on 1 point 960 Megahertz. The 160 meter Amateur band was chosen for the experiment because the frequencies 800 to 900 kilohertz are now

part of the very crowded medium wave broadcast radio spectrum.

Soon after GB3SSS took to the air, its signal was received by members of the Marconi Radio Club on Signal Hill. This is on very spot where the same signals were first heard almost 105 years ago. And while this initial confirmation appears to back up Marconi's claim of spanning the Atlantic by radio, the two clubs are continuing to transmit, receive and to analyze the results. - From Amateur Radio Newline 2/09/07

GARA Meeting Minutes



Regular Meeting Minutes January 22, 2007

The regular meeting of the Greensboro Amateur Radio Association was held Monday evening January 22, 2007, at 7:15 PM at the Golden Corral Steak house off Wendover Avenue.

The president John Doggett, KI4BMS, called the meeting to order. The Minutes of the last meeting were approved as published in the Feedline.

Chris Thompson, K4HC, spoke about the end of Morse code testing going into effect on Feb 23, 2007 and he reported that the local VE team will hold a special test session on Saturday February 24 for those wanting to upgrade.

Ernie Wall, NC4EW, gave the treasurers report stating that "we are looking good."

Roy Smith, N4BYU, proposed sending \$100.00 to support Newline. That was seconded by Carlton O'Rork, N4DFA, and was approved by the present members.

Al Alred, K4ZKQ, gave the Forecast report stating that every thing looks as expected.

The Greensboro Amateur Radio Association

President: John Doggett, KI4BMS
Vice-President: Chris Thompson, K4HC
Treasurer: Ernie Wall, NC4EW
Secretary: Greg Spencer, KG4UQV
Financial: Al Alred, K4ZKQ
Engineering Chairman: Carlton O'Rork, N4DFA
Operations: Roy Smith, N4BYU
Members at Large: Clark Doggett, KG4HOM
Tom Forrest, N4GVK
Appointed Positions:
News letter editor and Webmaster:
Tom Forrest, N4GVK

"The Feed Line" is © 2007 by the Greensboro Amateur Radio Association and published monthly. Our address is P.O. Box 7054, Greensboro, NC 27417. The purpose of the newsletter is to provide the club, prospective members and the Triad information about the club and amateur radio in general. Material and information should reach the editor by the first Friday of the month for the next edition of the newsletter. Opinions expressed in "The Feed Line" do not necessarily represent the views of the officers, directors, editor or members of the Greensboro Amateur Radio Association. Material may be reproduced, provided proper credit is given to GARA.

Carlton O'Rork N4DFA, gave the engineering report, stating that the repeaters are in good shape but we will need to look at replacing the duplexers in the near future. Carlton also said that he had completed the New member welcome sheet and the sheet will be direct mailed to all members and given to new members when they sign up.

Tom Forrest, N4GVK, gave the Webmaster / Feedline report stating that he needs more articles. And he also mentioned an article about the CHU Canada radio station that is in the current Feedline.

John Doggett, KI4BMS, spoke about the club helping any ham with upgrades or maintenance to their antennas or equipment.

New Business: Alan Bradley, KD4IUN, spoke about an upcoming soccer tournament on Memorial Day weekend. And he is looking for volunteers. Alan also spoke about the radio station at the natural science center and stated that we need to try to have someone there on weekends when the center is busy. There are also some good programs coming up at the center in February and it would be great to have Amateur Radio represented.

Chris Thompson, K4HC, gave a great program on "Stealth Antenna's" that showed ways to put up an almost invisible antenna.

Dick Battle, AK4RB demonstrated how surface mount technology has progressed with the miniaturization of components and multi layer printed circuit boards. He showed some examples of aircraft display driver circuit boards.

The meeting adjourned at 8:30 PM

Board Meeting Minutes February 15, 2007

The following board members were present: John Doggett, KI4BMS; Chris Thompson, K4HC; Roy Smith, N4BYU; Tom Forrest, N4GVK; and Greg Spencer, KG4UQV;

The meeting was called to order at 7:40 PM

Chris Thompson, K4HC reported that Bill Mauldin, WG4R would give a presentation on Police Badges at the regular meeting this month. Chris also said that the News and Record would be taking pictures at the special test session on Feb. 24/07. Chris said that he has been looking into a club construction project featuring a single band software defined radio receiver kit that can be built for around \$10.00. There will be more information on this at a later time.

Tom Forrest, N4GVK stated that the website is doing well. Tom also said that he has received several e-mails about ham radio testing. The repeater information sheets have been printed.

Roy Smith said the club needs more members and the board decided to send out letters to past club members that have not renewed in the last few years

Greg Spencer, KG4UQV has contacted the News and Record about a story on the club in the People and Places section of the paper. Chris Thompson, K4HC will write an article and Tom Forrest has some pictures to send in with it.

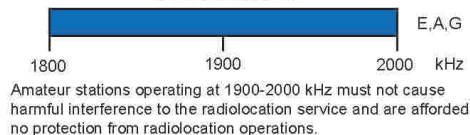
The meeting closed at 8:30 PM

NEXT MEETING

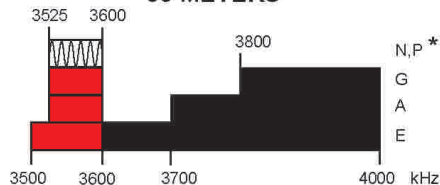
The next meeting of the Greensboro Amateur Radio Assoc. will be February 26, 2007 at the Golden Corral Steak House off Wendover Ave, near Sam's Club. The program will be presented by Bill Mauldin, WG4R, on aircraft accidents. Bill, is a retired Delta Airline Captain and retired major in the Florida Highway Patrol, is nationally recognized as an authority on badge collecting and police memorabilia.

Effective Date December 15, 2006

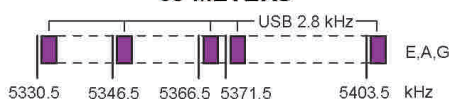
160 METERS



80 METERS

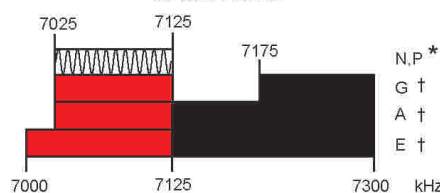


60 METERS



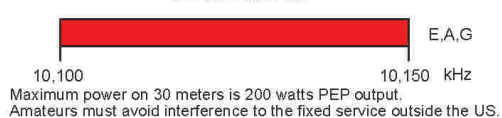
General, Advanced, and Amateur Extra licensees may use the following five channels on a secondary basis with a maximum effective radiated power of 50 W PEP relative to a half wave dipole. Only upper sideband suppressed carrier voice transmissions may be used. The frequencies are 5330.5, 5346.5, 5366.5, 5371.5 and 5403.5 kHz. The occupied bandwidth is limited to 2.8 kHz centered on 5332, 5348, 5368, 5373, and 5405 kHz respectively.

40 METERS

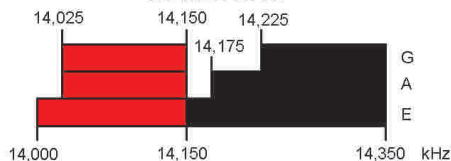


† Phone and Image modes are permitted between 7075 and 7100 kHz for FCC licensed stations in ITU Regions 1 and 3 and by FCC licensed stations in ITU Region 2 West of 130 degrees West longitude or South of 20 degrees North latitude. See Sections 97.305(c) and 97.307(f)(11). Novice and Technician Plus licensees outside ITU Region 2 may use CW only between 7025 and 7075 kHz. See Section 97.301(e). These exemptions do not apply to stations in the continental US.

30 METERS



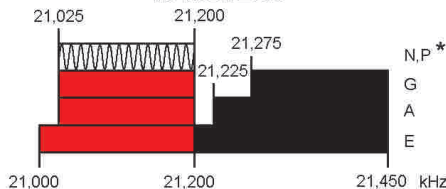
20 METERS



17 METERS



15 METERS



12 METERS



10 METERS



6 METERS



2 METERS



1.25 METERS ***



Novices are limited to 25 watts PEP output from 222 to 225 MHz.

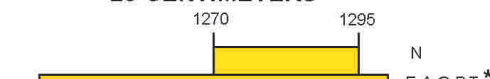
70 CENTIMETERS **



33 CENTIMETERS **



23 CENTIMETERS **



Novices are limited to 5 watts PEP output from 1270 to 1295 MHz.

US AMATEUR POWER LIMITS

At all times, transmitter power should be kept down to that necessary to carry out the desired communications.

Power is rated in watts PEP output. Unless otherwise stated, the maximum power output is 1500 W.

Power for all license classes is limited to 200 W in the 10, 100-10, 150 kHz band.

Novices and Technicians are restricted to 200 W below 28.5 MHz.

In addition, Novices are restricted to 25 W in the 222-225 MHz band and 5 W in the 1270-1295 MHz subband.

KEY

- = CW, RTTY and data
- = CW, RTTY, data, MCW, test, phone and image
- = CW, phone and image
- = CW and SSB phone
- = CW, RTTY, data, phone, and image
- = CW only
- = USB Phone only

E = AMATEUR EXTRA
A = ADVANCED
G = GENERAL
P = TECHNICIAN PLUS
T = TECHNICIAN
N = NOVICE

*Technicians who have passed the 5 wpm Morse code exam are indicated as "P".

**Geographical and power restrictions apply to all bands with frequencies above 420 MHz. See *The ARRL FCC Rule Book* for more information about your area.

***219-220 MHz allocated to amateurs on a secondary basis for fixed digital message forwarding systems only and can be operated by all licensees except Novices.

All licensees except Novices are authorized all modes on the following frequencies:

2300-2310 MHz
2390-2450 MHz
3300-3500 MHz
5650-5925 MHz
10.0-10.5 GHz
24.0-24.25 GHz
47.0-47.2 GHz
76.0-81.0 GHz
122.25-123.0 GHz
134-141 GHz
241-250 GHz
All above 275 GHz



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SPECIAL TESTING SESSION SLATED

A special testing session will be held Saturday, February 24. This will allow those wishing to upgrade, to take advantage of the new NO code ruling.

Testing will be held at the Hickory Building, which is on Centerview Dr., off Meadowview, off High Point Rd. at Highway 40. Testing starts at 9:00 AM, You need to bring two forms of ID and including a Photo ID and any previous licenses and/or CSE's.

Contact by e-mail to the following person:
ag4nc@bellsouth.net

for a reservation/seat which is not necessary, but requested.

**When You Get Your New License Or
Upgrade Join GARA**

***Get Turned On!
Get Powered Up!***



Greensboro Amateur Radio Assoc.

**We are a diverse group of Amateur Radio operators
providing public service for the Triad area.**

**If you want to be part of an organization that "Gets It Done"
join GARA. We are planning an exciting year for
Amateur Radio in the Triad area.**

Visit us on the web at: www.w4gso.org
If you have any questions, please e-mail
us at info@w4gso.org



145.150 left, 100 Hz. tone
442.875 right, 88.5 Hz. tone

Greensboro Amateur Radio Assoc. • P.O. Box 7054 • Greensboro, NC 27417

Engineering Report

by Engineering Chairman Carlton, O'Rork, N4DFA



A new member letter has been completed and will be printed shortly. The repeaters appear to be working fine, however, at some point during this year the club will have to consider the purchase of a new duplexer for the VHF machine. It will be beginning to degrade due to its age and the fact that it is obsolete.

Now Processing Amateur Radio Vanity Call Sign Backlog

NEWINGTON, CT, (ARRL) -- FCC The FCC has resumed processing new Amateur Radio vanity call sign applications. An initial stab at whittling down the backlog began February 8 -- five weeks to the day after the Wireless Telecommunications Bureau (WTB) issued the last vanity call sign prior to the resumption. The Commission stopped processing new vanity call sign applications received on or after December 18 while it readied the Universal Licensing System (ULS) vanity application software to accommodate a December 15 rule change to discourage the filing of multiple applications for the same call sign. The FCC has continued to accept new vanity applications and to process vanity renewals. According to a WTB staff member, speaking on background, the Commission could wrap up backlog processing and be back on track by next week.

Ham Happenings NEWS briefs

Get Well

We wish a speedy recovery to Ernie Wall, NC4EW, after knee replacement surgery recently. Ernie reports he's doing well and going through physical therapy.

Article Published

GARA news letter editor and web master, Tom Forrest, N4GVK, will have a short article published in the March, 2007 issue of QST magazine. The article is an idea for marking USB cables for easy identification. The same article appeared in the August, 2006 edition of the Feed Line.

Upcoming Hamfests & Meetings

March 10-11: North Carolina Section

Convention/Charlotte Hamfest

March 25: Down East Hamfest,

Kinston, NC

March 31: State ARES Meeting, Raleigh
(time & location TBA)

April 1: North Carolina State
Convention/Raleigh Hamfest

"We've resumed processing, and by next week we'll be caught up," said the staffer, who conceded that the FCC's ULS software had not been fully tested to ensure it could deal with the multiple-applications issue when the new rule's December 15 effective date rolled around. "We knew the date was coming, but the software wasn't quite ready." The staff member indicated the Commission could complete processing of applications that have been sitting in the queue as early as Monday, February 12. Under normal circumstances, vanity applications submitted on January 22 would have been issued February 9.

The Commission just today removed the January 11 ULS Web site advisory announcing the new vanity call sign processing hiatus. So far, the WTB appears to have granted some 125 vanity call sign applications submitted between December 18 and December 22. Another 500 or so applications remain in the queue.

The FCC this week also issued a public notice to announce the formal

implementation of the multiple applications rule, §97.19(a)(1), effective February 8. The notice said the ULS would limit individuals to filing only one vanity call sign application on the same day. "In the case where an applicant files multiple vanity call sign applications on the same day, only the first-filed application will be considered for the process, and the additional applications will be dismissed," the FCC said. "This new process will eliminate the possibility of an applicant having more than one application for the same call sign being considered on any one day."

The FCC is processing new vanity call sign applications now in the queue in the order they were received. Typically, it takes 18 days from the time the FCC receives a vanity application until the call sign is issued -- or the application is denied. The current vanity call sign fee, payable for new applications as well as renewals, is \$20.80 for the 10-year license term.

Solderless XLR Connectors From Neutrik

Audio connectors do not normally make the news, but this one does. It's the world's first solderless X-L-R connector.

A wishful question here...? Did Santa bring you one of those new, high-end H-F radios for Christmas? One that uses a balanced microphone input through a 3-pin X-L-R connector? If so, here's a product that might interest you.

Connector manufacturer Neutrik has announced what it calls the industry's first line of crimp-on X-L-R cable connector and chassis receptacle products.

X-L-R connectors have been a standard in the broadcast and sound reinforcement business for decades but are fairly new to ham radio. Using this type of connector

in conjunction with a balanced audio input on a transmitter and a balanced output mic like the Heil PR-40 assures reduced hum pick-up and can help in curing stray R-F feedback problems as well.

Until now, installing these connectors required soldering and mechanical assembly. Neutrik says that its three-pole NC3FD-LX-HA plug and NC3MD-LX-HA chassis connectors are terminated with hand crimp tools. This eliminates the need for soldering and greatly speeds up connector installation.

More about these new connectors and other Neutrik products are on-line at www.neutrik.com (Broadcast Technology Information - via AR NewsLine)

Area Activities

FOURTH MONDAY – at 6:30 PM, the **Greensboro Amateur Radio Association** have their regular monthly meeting at the Golden Corral on Landview Dr., off W. Wendover Ave. Please plan to gather at 6:30 PM for dinner. The meeting is scheduled to start at 7:15 PM

CLUB NETS:

SUNDAYS – weekly at 9 PM, the **GARA News and Information Net**. This net features NewsLine and is on the 145.150, W4GSO repeater. Roy Smith, N4BYU is always looking for net controls. Contact him if you would like to help.

THURSDAYS – The **Guilford County ARES Net** meets on the 145.150 repeater (100 Hz. tone) at 9 PM.

TUESDAYS – at 8 PM, the **2 Meter SSB Net** meets on 144.225 Mhz. USB. Chris Thompson, K4HC is the net control station.

WEDNESDAYS – The **Guilford Amateur Society** holds their weekly net on the 145.250, W4GG repeater with an 88.5 Hz. tone. Jim Hightower, W4JLH is the net control.

TUESDAYS – at 8:30 PM The **Triad SkyWarn Net** meets on the 147.225, K4ITL repeater, no tone required.

OTHER ACTIVITIES :

FIRST MONDAY – The **Guilford County A.R.E.S.** monthly meeting is held at 1002 Meadowood St. off W. Wendover Ave, in the EMS building, beginning at 7 PM.

THIRD MONDAY – at 6:30 PM The **Guilford Amateur Society** holds their monthly meeting at the Greensboro Police Western Sub Station at 300 Swing Rd in the community room. Refreshments at 6:30 PM and the business meeting begins at 7 PM.

SATURDAYS – at the K&W Cafeteria on Big Tree Way, hams get together for **Saturday Breakfast** at 7:30 AM. Talk-in is on the 145.150, W4GSO repeater, with 100 Hz. tone.

THURSDAY & FRIDAYS – at 11 AM, Greensboro Hams get together for lunch. On Thursday they meet at K&W Cafeteria off Big Tree Way and on Friday lunch is at the K&W Cafeteria off South Holden Road.

EVERY FRIDAY – at 8 PM (approximately) Greensboro Hams get together for coffee at Guilford College Rd. (winter location till Daylight Savings time changes)

Greensboro Amateur Radio Association
P.O. Box 7054
Greensboro, NC 27417



Web:
www.w4gso.org

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Membership
For
2007!**

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